

ABSTRACT

For manufacturing particularly uniform and mirror bright copper coatings that are leveled and ductile as well using a relatively high current density, halogenated or pseudohalogenated monomeric pheanzinium compounds or a purity at least 85 mole-% and having the general chemical formula (I) are utilized in which R¹, R², R³, R⁴, R^{7'}, R^{7''}, R⁸, R⁹, X and A have the significations denoted in the claims. The compounds are prepared by diazotizing a suited starting compound prior to halogenating or pseudohalogenating it in the presence of mineral acid, diazotization means and halide or pseudohalide, with the reaction steps being run in one single vessel.